QUARTERLY GROUNDWATER MONITORING REPORT (JUNE 2003)

HAWLEY AUTO BODY AND PAINT
2902 LYTTON STREET
SAN DIEGO, CA 92110

UNAUTHORIZED RELEASE
FILE NO. H12948-002

PREPARED BY:
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July 22, 2003
Project No. 200223H

Dr. Nasser Sionit
Site Assessment and Mitigation Program
County of San Diego
Department of Environmental Health Services
1255 Imperial Avenue, 3rd Floor
P.O. Box 129261
San Diego, CA 92112-9261

Re: Quarterly Groundwater Monitoring Report
Hawley Auto Body and Paint
Unauthorized Release File No. H12948-002
2902 Lytton Street
San Diego, CA 92110

Dear Dr. Sionit:

On behalf of our client, Hawley Auto Body and Paint, D-MAX Engineering, Inc. (D-MAX) is pleased to submit the attached Quarterly Groundwater Monitoring Report. This work was conducted on June 6 and 9, 2003, in accordance with the County of San Diego's letter dated November 7, 2002 and the submitted workplan dated November 20, 2002.

Should you have any questions regarding this report, please do not hesitate to contact me at (858) 455-9988 Ext.22.

Sincerely,
D-MAX Engineering, Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

cc: Mr. Don Hawley, Hawley Auto Body and Paint

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SITE DESCRIPTION

Hawley Auto Body And Paint is located at 2902 Lytton Street, San Diego, California, approximately 200 feet southeast of Rosecrans Street (Figure 1). The project site is bordered on the south side by Lytton Street and on the west side by an AM/PM mini-mart and Loma Carwash. To the east of the project site is a motorcycle shop, and to the north of the site are apartments and single-family residential properties. A review of the 1975 United States Geological Survey (USGS) 7.5 Minute Quadrangle, Point Loma, California topographic map indicates that the site lies at an elevation of approximately 40 feet above mean sea level (MSL).

Currently, there are nine groundwater monitoring wells at the site. Based on the workplan submitted on November 20, 2002, nine monitoring wells are required to be sampled on a quarterly basis for a period of one year. The monitoring wells have been sampled historically under a separate workplan between February 2000 and February 2002; however, the County requested an additional year of quarterly monitoring. This report presents the third quarter sampling results from the June 2003 quarterly sampling event.

MONITORING WELL PURGING AND SAMPLING

On June 6 and 9, 2003, D-MAX Engineering, Inc. conducted the third round of groundwater sampling at Hawley Auto Body And Paint. Monitoring wells MW-1 through MW-9 were purged, and groundwater samples were collected and submitted to an analytical laboratory. The purging started with measuring the depth to groundwater at each well. The depth to groundwater ranged from 21.01 feet below ground surface (bgs) at monitoring well MW-9 to 28.53 feet bgs at monitoring well MW-1. Table 1 presents the elevations of the monitoring wells and groundwater elevations that were measured. The results of the groundwater elevation were used to develop a groundwater contour map shown in Figure 2. The groundwater flow direction was calculated to the east with an approximate average gradient of 0.0015 feet/foot.

The borehole volume for each well was calculated by using the protocol outlined in Section 5 of the 2002 Site Assessment and Mitigation (SAM) Manual. Having determined the recharging characteristic of the wells, the purging process commenced. An electric water pump was used to discharge groundwater from each of the monitoring wells. The

discharged groundwater was placed into 55-gallon drums kept on-site to be disposed of at a later time.

Groundwater removal from each well took place in several steps. Initially, one borehole volume of water was removed, and the pH, temperature, electrical conductance, and depth of the water were measured. During the second step, one-half borehole volume of water was removed, and similar field water quality measurements were conducted. If the measured change of pH and conductivity was greater than 10 percent of the previous readings, the process was repeated for an additional one-half borehole volume of water. This process was repeated until the measured change of pH and conductivity were less than 10 percent of the previous measurements. The field data sheets used to record this process are included in Appendix A.

Groundwater samples were collected when the water table had recovered 80 percent of the initial measurement. Samples were collected with disposable bailers and were then transferred into four 40 milliliter glass containers and one amber bottle. The bottles were then labeled, stored in a sealed cooler, and submitted to EnviroMatrix Analytical Laboratory within the recommended holding times.

GROUNDWATER SAMPLE ANALYSIS

Nine sets of groundwater samples (one set for each monitoring well) were collected. No free product was observed at any of the monitoring wells. Most of the water removed had a clear clarity; however, some silt was observed in water removed from monitoring wells MW-1 and MW-9. A strong hydrocarbon odor was detected at monitoring wells MW-2, MW-3, MW-5, MW-6 and MW-7. Small patches of an oily sheen were present on the surface of water removed from monitoring well MW-2.

Samples were analyzed for total petroleum hydrocarbons (TPH) at full carbon range in general accordance with Modified EPA Method 8015, as well as for benzene, toluene, ethylbenzene, and total xylene (BTEX), T-butyl alcohol (TBA), Di-isopropyl ether (DIPE), ethyl T-butyl ether (ETBE), T-amyl methyl ether (TAME) and methyl T-butyl ether (MTBE) in general accordance with EPA Method 8260B. The results of the analyses are presented in Table 2. The laboratory reports are included in Appendix B. A summary of all existing and

previous groundwater analyses conducted for monitoring wells MW-1 through MW-9 is presented in Table 3.

TABLE 1
MONITORING WELLS AND GROUNDWATER ELEVATIONS
JUNE 2003

Well Location	Top of Casing Elevation[1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)
MW-1	100.00	28.53	71.47
MW-2	97.50	26.12	71.38
MW-3	97.15	25.74	71.41
MW-4	94.08	22.77	71.31
MW-5	97.46	26.14	71.32
MW-6	97.02	25.67	71.35
MW-7	98.65	27.21	71.44
MW-8	97.25	25.82	71.43
MW-9	92.22	21.01	71.21

Notes:

[1] Based on an arbitrary datum of 100 feet at the top of monitoring well MW-1.

TABLE 2
QUARTERLY GROUNDWATER SAMPLE ANALYTICAL RESULTS, JUNE 2003

Sample Location	TPHg[1] [9]	TPHd[1][9]	Benzene[2] [9]	Ethyl-Benzene[2] [9]	Toluene[2] [9]	Total Xylene[2] [9]	MTBE[3][9]	TBA[4][9]	DIPE[5][9]	ETBE[6][9]	TAME[7][9]
MW-1	nd	nd [8]	nd	nd	nd	nd	**80.2**	nd	nd	nd	nd
MW-2	**59,100**	nd	**2280**	**1350**	**6290**	**5280**	nd	nd	nd	nd	nd
MW-3	**1060**	nd	nd	**28.2**	nd	**31.4**	nd	nd	nd	nd	nd
MW-4	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
MW-5	**10,800**	nd	**443**	**270**	**901**	**1248**	nd	nd	nd	nd	nd
MW-6	**29,200**	nd	**1010**	**798**	**3730**	**2870**	nd	nd	nd	nd	nd
MW-7	**7300**	nd	**2.10**	**61.9**	nd	**43.4**	nd	nd	nd	nd	nd
MW-8	**2640**	nd	nd	**7.52**	nd	nd	nd	nd	nd	nd	nd
MW-9	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

Notes:

1 TPH = Total petroleum hydrocarbons in general accordance with Modified EPA Method 8015B.
2 Benzene, ethylbenzene, toluene and total xylene analyzed in general accordance with EPA Method 8260B.
3 MTBE = Methyl T-butyl Ether analyzed in general accordance with EPA Method 8260B.
4 TBA = Tert-Butyl Alcohol analyzed in general accordance with EPA Method 8260B.
5 DIPE = DI-Isopropyl Ether analyzed in general accordance with EPA Method 8260B.
6 ETBE = Ethyl Tert-Butyl Ether analyzed in general accordance with EPA Method 8260B.
7 TAME = Tert-amyl methyl Ether analyzed in general accordance with EPA Method 8260B.
8 nd = Not detected above the analytical method reporting limit.
9 All concentrations in micrograms per liter.

TABLE 3
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS
YEARS 2000, 2001, 2002 AND 2003

Sample Location	Sampling Date	TPHg[(1)(5)]	Benzene[(2)(5)]	Ethylbenzene[(2)(5)]	Toluene[(2)(5)]	Total Xylene[(2)(5)]	MTBE[(3)(5)]
MW-1	02/25/00	nd[4]	**0.9**	nd	nd	**2.5**	**79.6**
	02/05/01	**430**	nd	nd	nd	nd	**364**
	05/14/01	**609**	nd	nd	nd	nd	**347**
	08/20/01	**31**	nd	nd	nd	nd	**409**
	11/12/01	nd	nd	nd	nd	nd	**458**
	02/18/02	**135**	nd	nd	nd	nd	**395**
	12/30/02	**22.0**	nd	nd	nd	nd	**99.1**
	03/25/03	nd	nd	nd	nd	nd	**88.6**
	06/06/03	nd	nd	nd	nd	nd	**80.2**
MW-2	02/25/00	**83,200**	**5,930**	**1,940**	**13,800**	**8,890**	**833**
	020/5/01	**62,000**	**4,870**	**1,750**	**10,200**	**9,360**	nd
	05/14/01	**14,600**	**2,130**	nd	**3,600**	**4,410**	nd
	08/21/01	**53,100**	**2,450**	**942**	**4,760**	**4,620**	nd
	11/13/01	**94,500**	**3,110**	**1,250**	**7,500**	**5,160**	nd
	02/19/02	**73,000**	**3,490**	**1,310**	**8,150**	**6,550**	nd
	12/31/02	**12,000**	**1,280**	**640**	**3,370**	**2,446**	nd
	03/26/03	**46,000**	**2,060**	**969**	**5,270**	**4,240**	nd
	06/09/03	**59,100**	**2,280**	**1,350**	**6,290**	**5,280**	nd
MW-3	02/25/00	**8,240**	**19**	**38**	**342**	**1,270**	**94**
	020/5/01	**7,000**	nd	**330**	nd	**742**	nd
	05/14/01	**106**	nd	nd	nd	nd	nd
	08/21/01	**12,500**	nd	**222**	nd	**561**	nd
	11/12/01	**2,430**	nd	**39.3**	nd	**37.9**	nd
	02/19/02	**9,200**	nd	**165**	nd	**340.5**	nd
	12/31/02	**4,900**	nd	**159**	nd	**346.8**	nd
	03/26/03	**2,130**	nd	**53.5**	nd	**64.2**	nd
	06/09/03	**1,060**	nd	**28.2**	nd	**31.4**	nd
MW-4	02/25/00	nd	nd	nd	nd	nd	nd
	02/05/01	nd	nd	nd	nd	nd	nd
	05/14/01	nd	nd	nd	nd	nd	nd
	08/20/01	nd	nd	nd	nd	nd	nd
	11/12/01	nd	nd	nd	nd	nd	nd
	02/18/02	nd	nd	nd	nd	nd	nd
	12/30/02	nd	nd	nd	nd	nd	nd
	03/25/03	nd	nd	nd	nd	nd	nd
	06/06/03	nd	nd	nd	nd	nd	nd
MW-5	02/05/01	**13,100**	**1,620**	**421**	**1,650**	**2,300**	nd
	05/14/01	**726**	**19.9**	nd	**1.10**	**260.6**	**19.6**
	08/21/01	**9,280**	**522**	**168**	**593**	**763**	**16.1**
	11/13/01	**14,300**	**708**	**263**	**927**	**990**	**20.7**
	02/19/02	**5,400**	**232**	**78.4**	**314**	**394**	nd
	12/31/02	**2,400**	**206**	**102**	**292**	**399**	nd
	03/26/03	**5,200**	**120**	**127**	**424**	**547**	nd
	06/09/03	**10,800**	**443**	**270**	**901**	**1,248**	nd
MW-6	02/05/01	**28,900**	**990**	**868**	**4,080**	**4,050**	nd
	05/14/01	**6,880**	**85.0**	nd	nd	**2,205**	**70**
	08/21/01	**41,300**	**1,420**	**845**	**4,290**	**2,760**	**124**
	11/13/01	**23,700**	**654**	**521**	**1,870**	**1,315**	**93.0**
	02/19/02	**24,000**	**642**	**464**	**1,430**	**1,355**	**97.2**
	12/31/02	**17,200**	**497**	**346**	**1,550**	**1,309**	**58.5**
	03/26/03	**8,300**	**272**	**246**	**1,060**	**871**	nd
	06/09/03	**29,200**	**1,010**	**798**	**3,730**	**2,870**	nd

TABLE 3 (continued)
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS
YEARS 2000, 2001, 2002 AND 2003

Sample Location	Sampling Date	TPHg[1][5]	Benzene[2][5]	Ethylbenzene[2][5]	Toluene[2][5]	Total Xylene[2][5]	MTBE[3][5]
MW-7	02/05/01	**6,180**	**4.2**	nd	nd	**168**	**3.7**
	05/14/01	**1,090**	**2.4**	nd	nd	**20.3**	nd
	08/21/01	**17,800**	**3.9**	**121**	**2.0**	**83.8**	nd
	11/12/01	**11,600**	**1.3**	**38.2**	nd	**14.0**	nd
	02/18/02	**5,600**	nd	**18.6**	**1.0**	**9.3**	nd
	12/31/02	**4,100**	**2.02**	**30.7**	nd	**20.24**	nd
	03/25/03	**5,240**	**4.56**	**49.5**	nd	**32.66**	nd
	06/09/03	**7,300**	**2.10**	**61.9**	nd	**43.4**	nd
MW-8	02/05/01	**1,050**	nd	nd	nd	**19.7**	**2.3**
	05/14/01	**97.0**	nd	nd	nd	nd	nd
	08/20/01	**2,960**	nd	**11.7**	nd	**2.3**	nd
	11/12/01	**5,830**	nd	**36.3**	nd	**4.3**	nd
	02/18/02	**1,890**	nd	**7.1**	**1.1**	**1.1**	nd
	12/30/02	**1,300**	nd	**2.18**	nd	nd	nd
	03/25/03	**1,360**	nd	**2.53**	nd	nd	nd
	06/09/03	**2,640**	nd	**7.52**	nd	nd	nd
MW-9	03/12/01	nd	nd	nd	**1.1**	nd	nd
	05/14/01	nd	nd	nd	nd	**3.4**	nd
	08/20/01	nd	nd	nd	nd	nd	nd
	11/12/01	nd	nd	nd	nd	nd	nd
	02/18/02	nd	nd	nd	nd	nd	nd
	12/30/02	nd	nd	nd	nd	nd	nd
	03/25/03	nd	nd	nd	nd	nd	nd
	06/06/03	nd	nd	nd	nd	nd	nd

Notes:

[1] TPH = Total petroleum hydrocarbon (in gasoline range) in general accordance with Modified EPA Method 8015.

[2] Benzene, toluene, ethylbenzene and total xylene analyzed in general accordance with EPA Method 8260B.

[3] MTBE = Methyl tert- butyl ether analyzed in general accordance with EPA Method 8260B

[4] nd = Not detected above the analytical method reporting limit.

[5] All concentrations in micrograms per liter.

ATTACHMENT A

GROUNDWATER SAMPLING DATA SHEETS

ATTACHMENT B

LABORATORY ANALYTICAL REPORTS